

## **Hurricane Harvey-Texas**

### **ESF-10**

#### **Situation Report #5**

**Subject:** SITREP #5  
**To:** Agency Leads  
**Thru:** Matthew Loesel. PSC  
**From:** Unified Command  
**Date:** 9/3/2017  
**Reporting Period:** 9/3/2017

## **1. Introduction**

### **1.1. Background**

Hurricane Harvey made landfall at 2300 ET, August 26<sup>th</sup>, as a Category 4 storm near Rockport, Texas. Harvey stalled over southeastern TX. Due to its slow motion and a prolonged period of onshore flow, the impacted areas of Texas received more than 50 inches of precipitation and catastrophic flooding occurred. Hurricane Harvey left EPA Region VI and dissipated over the Ohio Valley.

An ESF-10 Mission Assignment was signed on August 28, 2017. The US Environmental Protection Agency (EPA), Texas Commission on the Environmental Quality (TCEQ), Texas General Land Office (TGLO) and the US Coast Guard (USCG) have entered into Unified Command to begin the evaluation, clean-up and recovery of spills, releases and orphan containers.

## **2. Current Activities**

### **2.1. Operations Section**

On September 3, 2017, the agencies under Unified Command conducted operations using the Natural Disaster Operational Workgroup (NDOW) Standard Operating Procedures, NDOW forms and Response Manager in both the Alpha (Corpus Christi) and Bravo (Houston) Branch.

The Oil Discharge Assessment Group utilized by Alpha Group during the previous operational period was replaced with an ER/Recovery Group. An Oil Recovery Group consisting of two teams was added to the Alpha Branch to begin closing out oil discharges discovered by the assessment teams. The NRC Investigation Group utilized by Bravo Branch during the previous operational period was replaced with a Container Recovery Group.

Operational activities for September 3, 2017 include all of the teams mentioned above. Geographic areas focused on by Alpha Branch during the previous operational period including Port Aransas and Mustang Island are largely complete except orphan containers being carried in from the tide. These containers will be addressed as they

are discovered. Projected Alpha Branch geographic areas for the this operational period include Rock Port, Aransas Bay and Victoria.

In addition, an Aerial Operations Team will be located in Bravo. Discussions regarding Charlie Branch have started and when feasible, several EPA personnel and a Data Unit will be deployed.

The phone bank in Austin, consisting of EPA and TCEQ personnel continue contacting drinking water and waste water facilities by phone. Table 1 displays the teams which were deployed in Alpha and Bravo Branches during this operational period:

**Table 1: Types of Teams Deployed 9/2/17**

Team Type	Alpha Branch	Bravo Branch
Water Assessment Teams	3	
Hazard Evaluation	2	6
Oil Discharge Assessment	3	5
Container Recovery		2
Oil Recovery Group	2	
ER/Recovery Group	3	
Arkema Group		1
Air Operations Group		1

The Water Assessment teams visited seven facilities and made the following status determinations.

**Table 2: Drinking Water and Waste Water Assessments Performed on during current operational period.**

Status of Facility with On-Site Visit	# of Facilities Assessed on 9/2/17
Loss of Power Not on Generator	1
On Generator Power	2
Inoperable	2
Operating	0
Out of Contant (No Response)	0
Results of Testing Pending	2

The Hazard Evaluation, Oil Discharge Assessment, ER/Strike Team and Container Recovery Teams opened the following number of targets (orphan containers and spills/discharges from facilities or vessels.)

**Table 3: Daily/Cumulative Summary of Hazard Evaluations/Recovery**

Status	Opened		Closed	
	9/2/17	Cumulative	9/2/17	Cumulative

Alpha Branch	10	37	4	37
Bravo Branch	24	69	1	6
NRC Reports	0	3	0	0

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

Note: 73 orphan containers have been collected at Alpha Branch staging area.

**Table 4: Daily/Cumulative Summary of Spills/Discharges**

Status	Opened		Closed	
	9/2/17	Cumulative	9/2/17	Cumulative
Alpha Branch	3	498	6	64
Bravo Branch	13	58	1	0
NRC Reports	2	41	0	6

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

**Table 5: Drinking Water Facilities Contacted and Current Status**

<u>Assessment Status</u>	<u># of Contact on 9/2/17</u>	<u>Cumulative</u>
Clear	44	111
Destroyed	0	3
Operating on Generator Power	9	46
Inoperable	9	149
Loss of Power - No Generator	38	253
Operating	420	1900
Out of Contact	64	179
Results of Testing Pending	38	64
Needs Site Visit	5	8
Unknown	39	250

**Table 6: Waste Water Facilities Contacted and Current Status**

<u>Assessment Status</u>	<u># of Contact on 9/2/17</u>	<u>Cumulative</u>
Inoperable	3	64
Operating	149	1882
Operating on Generator Power	3	48
Partial Operations	21	64
Needs Site Visit	0	2
Out of Contact (No Response)	2	46
Unknown	142	268

## 2.2. Other Notable Activities

Alpha Branch reported the following update for this operational period:

- That a total of 73 orphan containers have been collected at Alpha Branch staging area.
- ER/Recovery Group: Near Victoria, 6 hazardous material drums were discovered near a recreational area and removed.
- Oil Discharge Assessment Group: In Mesquite Bay, the ODA 2 discovered a sheen (300 yards x 5 yards). The suspected source is a nearby platform owned by Chaparral. No ongoing discharge observed. Responsible party and Texas Railroad Commission were notified.
- In Port Aransas, the ODA 1 oversaw oil removal operations on multiple ferries. The vessel JC DINGWALL was righted and moored. The removal of over 300,000 gallons of diesel from the Signet Enterprise (oceangoing tug) continued.
- The Signet Arturis (oceangoing tug) was moving for repairs and began to leaking oil around Bludworth Marine. OSRO on scene and mitigating/recovering the discharge.

Bravo Branch provided the following update for the previous operational period:

- The oil discharge assessment branch visited 13 facilities and queried seven throughout the Houston area of responsibility. Of those targets, we have two of particular concern and five to follow-up on in the next week.
- The Magellan facility along the Houston Ship Channel reported approximately 25,000 barrels of a gas/stock blend released within their facility and currently contained in secondary containment. An OSRO has been hired and they drafted a transfer plan to conduct an over the top transfer from secondary containment back into a facility tank. The transfer plan was routed to USCG Sector Houston Operations Department and pends approval following safety assessment.
- The San Jacinto River and Rail Facility reported an approximately 15,000 gallons of waste oil discharged within their facility to include 12 mystery drums scattered across the facility. Damage Assessment teams confirmed that vegetation and residual ponds are coated with an oil. The RP is in the process of hiring an OSRO to commence clean-up operations. No mobile oil visible in the waterway; oil has clung to vegetation. Discharge assessment teams plan to follow-up to confirm clean-up moves forward and conduct SCAT.
- Houston's Helicopter, N-972L was airborne throughout the day and reported no major pollution concerns, but noted small targets to investigate along the shoreline. They did note that the Lake Houston area was still heavily flooded, but waters were

residing quickly. N-972 patrolled from Galveston to Matagorda, they canvassed the Houston harbor and conducted a sortie overhead Lake Houston.

- Our hazard evaluation is 100% complete on shoreline assessments. A team was routed to investigate a report of adrift containers at an intersection in Dickens, TX. Responders confirmed containers were not on the road and marked them for further investigation. Hazard Evaluation Group: Assessed 18 targets mostly consisting of propane tanks, tank drums, and gas cans.

Two USCG PIOs are mobilizing to Alpha Branch ICP during this operational period to assist the current EPA PIO.

ARKEMA: As of Sunday, Sept. 3, three trailers of organic peroxide caught fire following compromise of refrigeration units due to catastrophic flood waters. The remaining trailers are at risk of catching fire over the next few days. Rather than risk additional damage to the facility or the surrounding area, the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office will perform a controlled ignition. First responders are outside the evacuation zone, but remain in the area, for quick response to ensure the safety of the community around the facility. Local officials are maintaining a 1.5-mile area of evacuation to assure that the public is protected. Air monitoring has confirmed that this is sufficient based on current conditions and anticipated events.

ASPECT: During the previous operational period ASPECT was task with monitoring the situation at the Arkema facility. This consisted of multiple periodic (30 minutes) sweeps of the facility. Once completed ASPECT resumed rapid needs assessments at targets west and south of Arkema. ASPECT completed about ½ of zone 5 (Crosby to Huffman) consisting of approximately 39 target points. The system has also been assigned targets in Zone 6 (Crosby down to Baytown) consisting of 49 targets. ASPECT is preparing for flight 9 with a follow-on flight 10 consisting of Arkema and zones east of Crosby.

Rapids Needs Assessment (RNA) targets include Remedial Management Plan (RMP) locations, wastewater facilities, water treatment facilities, and National Priority List (NPL) sites. ASPECT flights collected aerial images over several hundred target sites. These targets have been arbitrarily categorized by the ASPECT team into geographic area designated by chronological zone numbers. Zone 1 is the southern most geographic area and they extend northeast to Port Arthur. Figure 2 shows the current zones being surveyed today. Zones 5 & 6 are being flown because of their proximity to the Arkema site. Zone five and six are shown in Figure One below.

**Figure One. Zones Five and Six.**

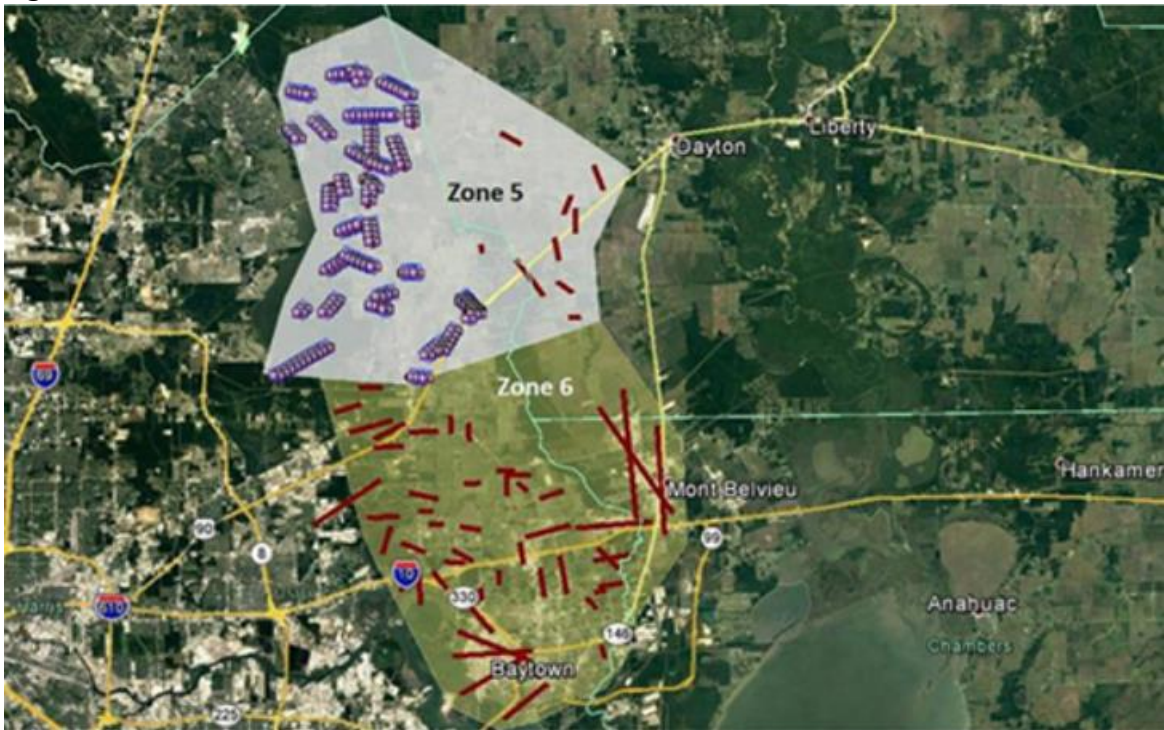
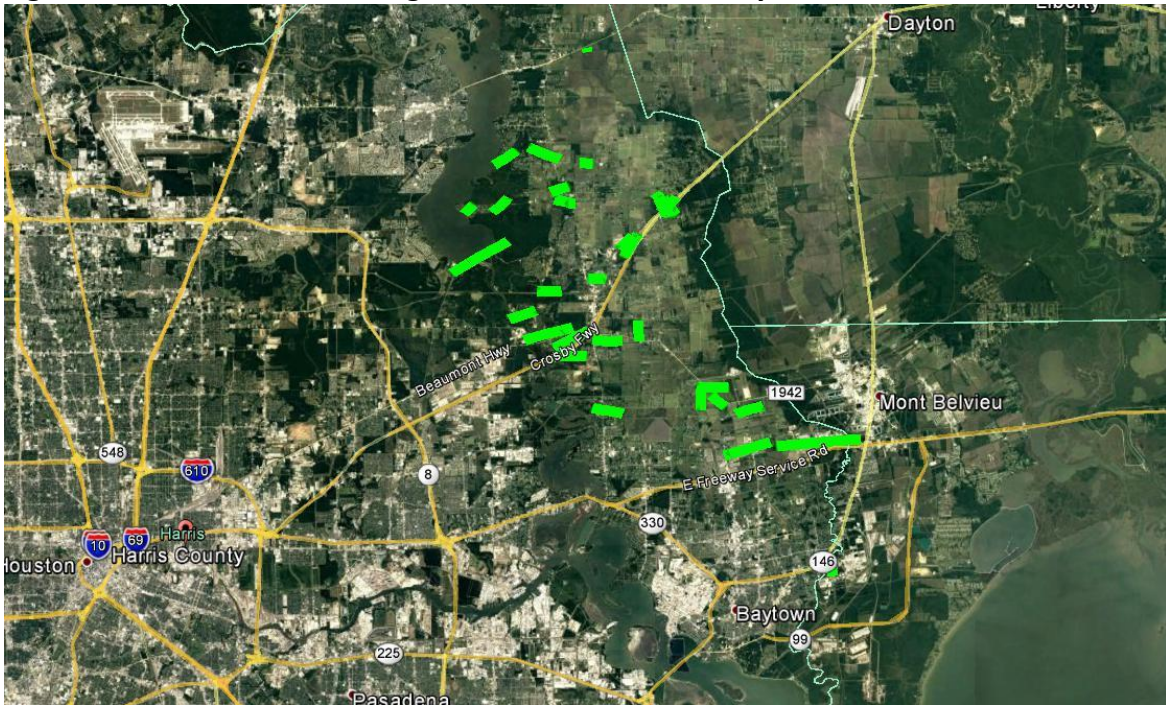


Figure Two shows locations where ASPECT conducted chemical monitoring in Harris County to date as part of our Rapid Needs Assessment mission. To date, there have been no confirmed detections over primary targets which are wastewater and drinking water treatment facilities. As we make progress on the Rapid Needs Assessment mission, we will continue to assess any potential positive hits over non-Arkema sites.



**Figure Two. ASPECT monitoring locations in Harris County.**



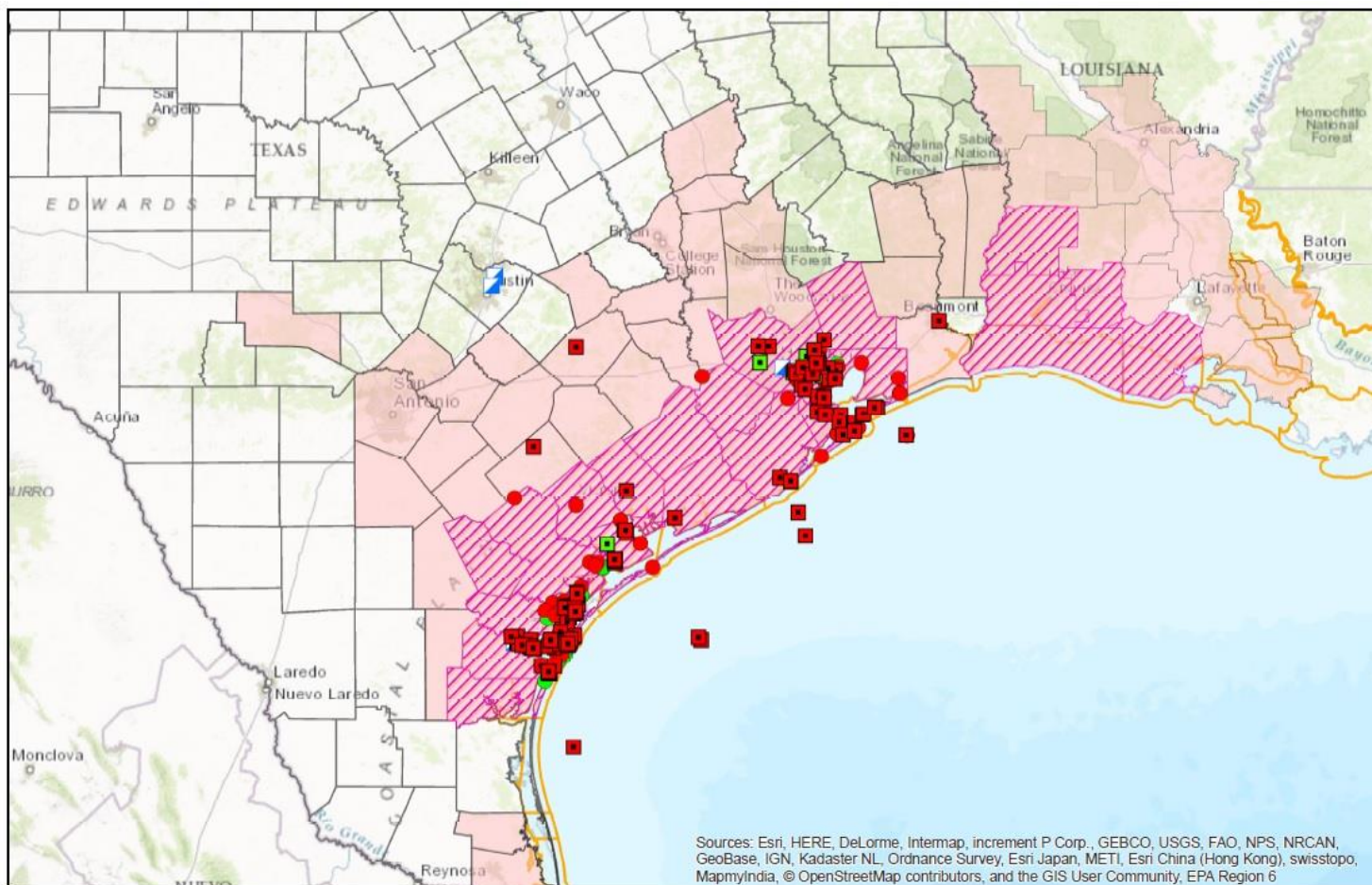
### 3. Participating Agencies

- Texas Commission on Environmental Quality
- Texas General Land Office
- Texas Parks and Wildlife
- 6<sup>th</sup> Civil Support Team
- US Environmental Protection Agency
- US Coast Guard
- National Oceanic and Atmospheric Agency

### 4. Personnel on Site

Agency	ICP	Alpha Branch	Bravo Branch	Charlie Branch*	Austin
US EPA	6	3	14		
USCG	10	21	29	1	1
TCEQ	2	17	30		
TGLO			0		
CST	8	9	0	0	
Contractors			5		

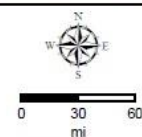
\*Charlie Branch in process of being staffed.



# Legend

- |                                                                                                                                  |                                               |                                                                                                                                                      |                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <span style="color: red;">■</span> Open                                                                                          | <span style="color: red;">●</span> Open       | <span style="color: blue;">■</span> Resources Locations                                                                                              | <span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> State Declared Counties |
| <span style="background-color: green; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Closed | <span style="color: green;">●</span> Closed   | <span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Federally Declared Counties | <span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Counties                                        |
| <span style="background-color: gray; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Unknown | <span style="color: gray;">●</span> No Status |                                                                                                                                                      |                                                                                                                                                  |

US EPA  
Viewer Map  
Copyright 2017

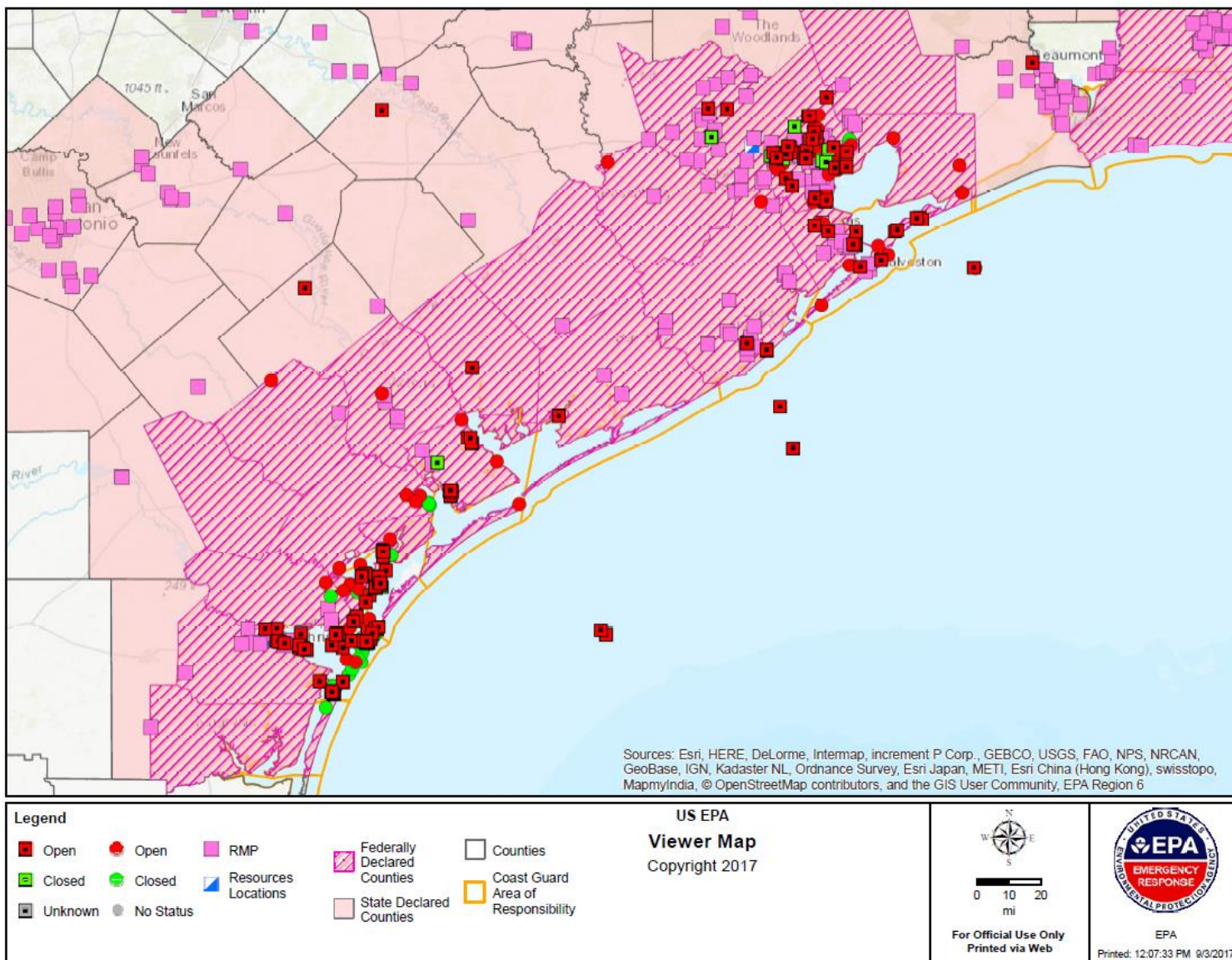


For Official Use Only  
Printed via Web



EPA  
Printed: 12:01:00 PM 9/3/2017





PHOTOS:

Photo One: Command & General Staff Meeting.



Photo Two: Incident Command Post in Corpus Christi.

